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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,254	09/29/2003	Anatoly S. Belkin	CE11195R	3196
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MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER NGUYEN, KHAI MINH	
			ART UNIT 2617	PAPER NUMBER
			NOTIFICATION DATE 10/17/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/674,254

Applicant(s)

BELKIN ET AL.

Examiner

Khai M. Nguyen

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's argument with respect to claim 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-13, 15-29, and 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin (U.S.Pub-20020051432) in view of Krishnamurthi et al. (U.S.Pub-20040246990) and further in view Ray et al. (U.S.Pat-6424638).

Regarding claim 1, Shin teaches a wireless communication unit (abstract) comprising:

a transceiver suitable to support an air interface with a first wireless communication network and with a second wireless communication network (fig.1, abstract, paragraph 0011); and

a controller (fig.3, element 30), coupled to and controlling the transceiver (fig.3, paragraph 0038),

Shin fails to specifically disclose obtaining a handover number that terminates on a mobility manager associated with the first communication network, the handover

Art Unit: 2617

number useable to facilitate a handover of ongoing communication of a first call on the first wireless communication network and wherein the handover is from the first wireless communication network to the second wireless communication network and wherein the handover is initiated by a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing. However, Krishnamurthi teaches obtaining a handover number (not show) that terminates on a mobility manager associated with the first communication network (paragraph 0008-0011), the handover number (not show) useable to facilitate a handover of ongoing communication of a first call on the first wireless communication network (paragraph 0008-0011) and wherein the handover is from the first wireless communication network to the second wireless communication network (paragraph 0008-0011) and wherein the handover is initiated by a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing (paragraph 0008-0011). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Krishnamurthi to Shin to provide method for handing over a call from a packet-switched network to circuit-switched network.

Krishnamurthi and Shin fails to specifically disclose handover number. However, Ray teaches handover number (col.3, line 49 to col.4, line 17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Ray to Krishnamurthi and Shin to perform a handover of a call between different types of systems.

Regarding claim 2, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 1, wherein the controller controls the transceiver to obtain the handover number from a network entity within the first communication network (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 3, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 1, wherein the controller controls the transceiver to forward information regarding the first call to the mobility manager to facilitate the handover (see Shin, paragraph 0005, 0007, 0027, *the mobile station sets up a communication channel with a destination base station while maintaining the initial communication channel with the first base station*).

Regarding claim 4, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 1, wherein the controller, when a pending handover is indicated (see Krishnamurthi, paragraph 0008-0011), controls the transceiver to initiate the handover call (see Shin, paragraph 0005, 0007, 0027, *the mobile station sets up a communication channel with a destination base station while maintaining the initial communication channel with the first base station*).

Regarding claim 5, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 4, wherein the controller controls the transceiver to switch the ongoing communication to the second wireless network (see Ray, col.3, line 49 to col.4, line 17) and to discontinue the ongoing communication with the first

communication network when the handover call has been connected (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 6, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 1, wherein the first wireless communication network is at least one of an IEEE 802.11 Wireless Local Area Network and Bluetooth (see Shin, fig.3, abstract, paragraph 0027, *first communication maybe LAN*) and the second wireless communication network is a wireless wide area network (see Shin, fig.3, abstract).

Regarding claim 7, Ray, Krishnamurthi, and Shin further teach the wireless communication unit of claim 1 wherein the controller obtains the handover number during the setup of the ongoing communication (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 9, Shin teaches a mobility manager for facilitating handover of ongoing communication from a first call between a wireless communication unit and a peer communication unit from a first communication network to a second communication network (fig.3, abstract, paragraph 0035), the mobility manager comprising:

a interface function to interface to the first communication network (fig.4, first mobile communication system 10) (fig.3, abstract, paragraph 0035); and

a controller coupled to and controlling the interface function (fig.3, abstract, paragraph 0035) to:

Shin fails to specifically disclose ascertain a handover number for the wireless communication unit, obtain call information corresponding to the ongoing communication of the first call, and the handover number terminating within the first communication network for use in facilitating the handover of the ongoing communication be initiating a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing. However, Krishnamurthi teaches ascertain a handover number (not show) for the wireless communication unit (paragraph 0008-0011), obtain call information corresponding to the ongoing communication of the first call (paragraph 0008-0011), and the handover number (not show) terminating within the first communication network for use in facilitating the handover of the ongoing communication be initiating a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing (paragraph 0008-0011). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Krishnamurthi to Shin to provide method for handing over a call from a packet-switched network to circuit-switched network.

Krishnamurthi and Shin fails to specifically disclose handover number. However, Ray teaches handover number (col.3, line 49 to col.4, line 17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Ray to Krishnamurthi and Shin to perform a handover of a call between different types of systems.

Regarding claim 10, Ray, Krishnamurthi, and Shin further teach a mobility manager of claim 9 wherein the controller further obtains the call information from one of the wireless communication unit and a network server (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 11, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 9 wherein the first communication network is at least one of an IEEE 802.11 Wireless Local Area Network and Bluetooth (see Shin, abstract, paragraph 0027, *first communication maybe LAN*) and the second communication network is a wireless wide area network (see Shin, fig.3, abstract, paragraph 0035).

Regarding claim 12, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 9 wherein the controller cooperatively with the interface function is operable to receive the handover call (see Shin, paragraph 0005, 0007, 0027).

Regarding claim 13, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 12 wherein the handover call is received from a network switching (see Shin, fig.4, switching center 13 and 23) function for the first communication network (see Shin, fig.4, first mobile communication system 10) and the controller further operates to facilitate connecting the peer communication unit to the handover call and sending a connect indication for the handover call to the wireless communication unit (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 15, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 13 wherein the controller operates to facilitate the handover call by

initiating a message that results in routing the ongoing communication of the peer communication unit to the handover call (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 16, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 15 wherein the message is further initiated on behalf of the wireless communication unit (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 17, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 15 wherein the message is further directed to the network switching function (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 18, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 15 wherein the message is directed to a first network switching function (see Shin, fig.4, switching center 13) and responsive to the message (see Krishnamurthi, paragraph 0008-0011), a corresponding message is directed to a second network switching function (see Shin, fig.4, switching center 23) that is supporting the ongoing communication with the peer communication unit (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 19, Ray, Krishnamurthi, and Shin further teach the mobility manager of claim 18 wherein a response message initiated by the peer communication unit is received by the controller via the interface function (see Krishnamurthi, paragraph 0008-0011) and this response message triggers sending the connect indication to the wireless communication unit (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 20, Ray, Krishnamurthi, and Shin further teaches the mobility manager of claim 9 wherein the ascertaining the handover number further comprises one of obtaining the handover number from the wireless communication unit (see Shin, paragraph 0023-0024), assigning and providing the handover number to the wireless communication unit, and obtaining the handover number from another network server (see Ray, col.3, line 49 to col.4, line 17).

Regarding claim 23, Shin teaches a method for facilitating handover of ongoing communication of a first call between a wireless communication unit and a peer communication unit wherein the handover being from a first communication network to a second communication network (fig.3, abstract, paragraph 0035), the method comprising:

obtaining call information corresponding to the first call using the first communication network (paragraph 0005, 0007, 0027); and

Shin fails to specifically disclose ascertaining a handover number for use by the wireless communication unit, the handover number terminating within the first communication network for use in facilitating the handover of the ongoing communication be initiating a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing. However, Krishnamurthi teaches ascertaining a handover number (not show) for use by the wireless communication unit (paragraph 0008-0011), the handover number (not show) terminating within the first communication network for use in

facilitating the handover of the ongoing communication by initiating a handover call made by the wireless communication unit on the second communication network to the handover number while the first call is ongoing (paragraph 0008-0011). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Krishnamurthi to Shin to provide method for handing over a call from a packet-switched network to circuit-switched network.

Krishnamurthi and Shin fails to specifically disclose handover number. However, Ray teaches handover number (col.3, line 49 to col.4, line 17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Ray to Krishnamurthi and Shin to perform a handover of a call between different types of systems.

Regarding claim 24, Ray, Krishnamurthi, and Shin further teach the method of claim 23, wherein the obtaining the call information further comprises obtaining the call information from at least one of the wireless communication unit (see Krishnamurthi, paragraph 0008-0011), and a network entity within the first communication network (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 25, Ray, Krishnamurthi, and Shin further teach the method of claim 1, wherein the first communication network is at least one of an IEEE 802.11 Wireless Local Area Network and Bluetooth (see Shin, fig.3, abstract, paragraph 0027, *first communication maybe LAN*) and the second wireless communication network is a wireless wide area network (see Shin, fig.3, abstract).

Regarding claim 26, Ray, Krishnamurthi, and Shin further teach the method of claim 23 further comprising receiving a handover call originating from the wireless communication unit using the second communication network that is directed to the handover number (see Shin, paragraph 0005, 0007, 0027).

Regarding claim 27, Ray, Krishnamurthi, and Shin further teach the method of claim 26 wherein the receiving the handover call results from determining that a handover condition is indicated (see Krishnamurthi, paragraph 0008-0011).

Regarding claim 28, Ray, Krishnamurthi, and Shin further teach the method of claim 27 wherein the determining the handover condition is performed by one of the wireless communication unit and another network entity within the first communication network (see Shin, paragraph 0005, 0007, 0027).

Regarding claim 29 is rejected with the same reasons set forth in claim 13.

Regarding claim 31 is rejected with the same reasons set forth in claim 15.

Regarding claim 32 is rejected with the same reasons set forth in claim 16.

Regarding claim 33 is rejected with the same reasons set forth in claim 17.

Regarding claim 34 is rejected with the same reasons set forth in claim 18.

Regarding claim 35 is rejected with the same reasons set forth in claim 19.

Regarding claim 36, Ray, Krishnamurthi, and Shin further teach the method of claim 23, wherein the ascertaining the handover number further comprises at least one

of obtaining the handover number from the wireless communication unit (see Ray, col.3, line 49 to col.4, line 17), assigning and providing the handover number to the wireless communication unit, and obtaining the handover number from another network server (see Ray, col.3, line 49 to col.4, line 17).

5. Claims 8, 21-22, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin (U.S.Pub-20020051432) in view of Krishnamurthi et al. (U.S.Pub-20040246990) in view Ray et al. (U.S.Pat-6424638) and further in view of Requena (U.S.Pub-20020126701).

Regarding claim 8, Shin, Krishnamurthi, and Ray further teach the wireless communication unit of claim 7.

Shin and Samadi fails to specifically discloses the handover number is obtained by including it in at least one of a Session Initiation Protocol (SIP) INVITE message and a response message to the SIP INVITE message. However, Requena teaches the handover number is obtained by including it in at least one of a Session Initiation Protocol (SIP) INVITE message (paragraph 0027-0038, 0084) and a response message to the SIP INVITE message (paragraph 0032-0038). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Requena to Shin, Krishnamurthi, and Ray to provide multiple instances of information necessary to keep the user completely located.

Regarding claim 21, Shin, Krishnamurthi, and Ray further teach the mobility manager of claim 9,

Shin and Samadi fails to specifically disclose teaches wherein the interface with the first communication network is at least one of a Session Initiation Protocol (SIP) interface and an H.323 interface. However, Requena teaches wherein the interface with the first communication network is at least one of a Session Initiation Protocol (SIP) interface and an H.323 interface (paragraph 0027-0038, 0084). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Requena to Shin, Krishnamurthi, and Ray to provide multiple instances of information necessary to keep the user completely located.

Regarding claim 22 is rejected with the same reasons set forth in claim 8.

Regarding claim 37 is rejected with the same reasons set forth in claim 21.

Regarding claim 38, Shin, Krishnamurthi, Ray, and Requena further teach the method of claim 37 wherein the ascertaining the handover number is done during the setup of the first call (see Ray, col.3, line 49 to col.4, line 17)

Regarding claim 39 is rejected with the same reasons set forth in claim 8.

Allowable Subject Matter

6. Claims 14, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Art Unit: 2617

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571.272.7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Au: 2617

10/7/2007



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10/11/07